

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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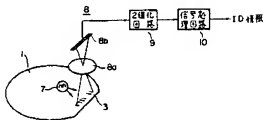
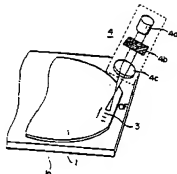
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TITLE : METHOD OF RECORDING AND  
READING IDENTIFICATION  
INFORMATION OF SEMICONDUCTOR  
WAFER



ABSTRACT : PURPOSE: To enable recording and reading with a simple optical apparatus by using a one-dimensional bar code as identification information to record into wafers of the raw material of a semiconductor integrated circuit.

CONSTITUTION: A wafer 1 is mounted on a mount 1a, the image of a slit 4b is projected to positions corresponding to each of the bars of a bar code 3 in a region near the OF of the wafer 1 and exposed to a light one after another with a projection aligner 4 comprising a light source 4a, the slit 4b, and an image formation lens 4c, and development and processing with an etching apparatus are performed to record the bar code 3. In reading, the bar code 3 is illuminated with an illuminator 7 and the image is formed on a line sensor 8b through an objective lens 8a. The line sensor 8b is formed from a one-dimensional CCD and the output signal thereof is decoded by the use of a binary-coding circuit 9 and a signal processing circuit 10. The bit configuration of the bar code 3 includes manufacture lot numbers and numbers of each wafer only, therefore, a simple apparatus can be used. Thereby the identification information of the semiconductor wafers can be recorded and read at a low cost and control of the wafers in an IC plant can be rationalized.

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